UltraWAVE BSC

GSM Base Station Controller

UltraWAVE MSC, BSC and BTS work hand-in-hand to reduce the total cost of network ownership, providing a network growth path for existing and future customers, and expand the addressable markets of ADC's GSM products. They serve as the flagship GSM product line for ADC Wireless.

The UltraWAVE product line provides a compact and cost effective platform, which helps lower the cost of network ownership. They are easy to upgrade or repair in the field and provide a range of new monitoring and control functions.

SPEC SHEET

Key BTS Features

- Dual Processor and redundant power supply
- GPRS ready
- Sophisticated handover algorithms
- Integrated TRAU function
- Star or daisy chain connection to BTSs
- SMS and cell broadcasting
- Encryption (A5/0, A5/1, A5/2)

UltraWAVE BTS

GSM Base Station Controller

The UltraWAVE BSC is ADC's high capacity Base Station Controller that aggregates and manages the communications between the BTS and the GSM switching center. The UltraWAVE BSC supports up to 84 TRXs, depending upon the network requirements. Based upon its compact and cost-effective design, the UltraWAVE BSC lowers network costs while increasing service quality within any GSM, DCS, or PCS digital wireless network. It offers the operators a more economical and easily manageable growth path. The majority of the operators can start with a BSC configured for the initial capacity and add more trunk cards to grow the network as needed. ADC's UltraWAVE BSC supports the ETSI GSM standard and its DCS/PCS derivatives.

The UltraWAVE BSC uses a standard compliant GSM A-interface which is tested to inter-operate with MSCs of all major GSM vendors.

Features:

- Supports GSM 850, GSM 900, DCS 1800, and PCS 1900 networks
- General Packet Radio Service (GPRS)
- Easy capacity expansion: modular design, field upgradeable
- Common hardware modules: ICP processor, E1 or T1, E1 or T1 with TRAU
- Dual processor redundancy
- Redundant power supply that supports PSU failure alarm
- 110/220 VAC, and -48 VDC power supply
- Versatile mounting options for 19", 23" or 24" racks
- Supports Enhanced Full Rate (EFR) and Full Rate speech coding
- A5/0, A5/1 encryption
- SMS and SMS cell broadcast
- Dynamic power control
- Automatic BCCH reassignment

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UltraWAVE BTS
GSM Base Station Controller

Specifications

Capacity:	84 TRXs, 466 Erlangs, 31 BTSs
Trunk Ports:	Up to 28 E1 or T1 Ports
Frequency Support:	GSM 850, GSM 900, DCS 1800, and PCS 1900
Dual Band Support:	GSM900 / DCS1800
INTERFACES	
MSC Link:	GSM Compliant A Interface; GSM Spec. 04.08, 08.08; ANSI 1992 CCITT 1988, 1992; BSSMAP, GSM 08.08 DTAP, GSM 04.07, 04.08, SCCP & MTP GSM spec 08.06
BTS Link:	Abis Interface, GSM spec. 04.08, 08.58, 12.21
SGSN Link :	Gb Interface, Frame Relay over E1 or T1, GPRS spec. 08.14, 08.16, 08.18 (Rel98)
OMC Link:	E1, T1, or Ethernet
Transmission:	Dual Port G7.03 compliant E1 75/120 Ohm; Dual Port T1.403 compliant T1 100 Ohm
Ethernet:	10/100 Mbps Ethernet, RJ-45 connector
Serial Port:	RS232, RJ-45 connector
GSM VOCODING	
Integrated TRAU:	Supports Enhanced Full Rate (EFR) or Full Rate Transcoding
POWER SUPPLY	
Input Voltage:	110/220 VAC, -48 VDC
Redundancy:	Redundant power supply
Alarm:	PSU failure alarm reported OMC
MECHANICAL	
Rack Mount:	Versatile mounting options for 19", 23" and 24" racks
Dimensions (HxWxD):	1051 x 560 x 647 mm (41.8 x 22.05 x 25.5 inches)
Weight:	163 kg (360 lbs)
OPERATING ENVIRONMENT	
Temperature:	-5° to 55° C (23° to 113° F)
Humidity (non-condensing):	10% to 90%
COMPLIANCE	Part 15 of the FCC Rules. FCC ID OEWASAB; Industry Canada ICES-003. IC: 3300ASB; EN5022: 1994/AI: 1995/A2: 1997; EN300 386V1.2.1 (2000-03) (TELECOM CTRS); CE APPROVED; TUV FILE: 30368241; 30368242; 30368243

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SPEC SHEET

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